



Inland Fisheries Division

Environmental Response and Restoration Program

Inland Kills and Spills Team

Greg Conley

TPWD Kills and Spills Team Regional Contacts

TEXAS PARKS & WILDLIFE

4200 Smith School Rd.
Austin, TX 78744
(800) 792-1112 (512) 389-4800

24 Hour Communication Centers
Austin (512) 389-4848
Houston (281) 842-8100

Kills & Spills Team

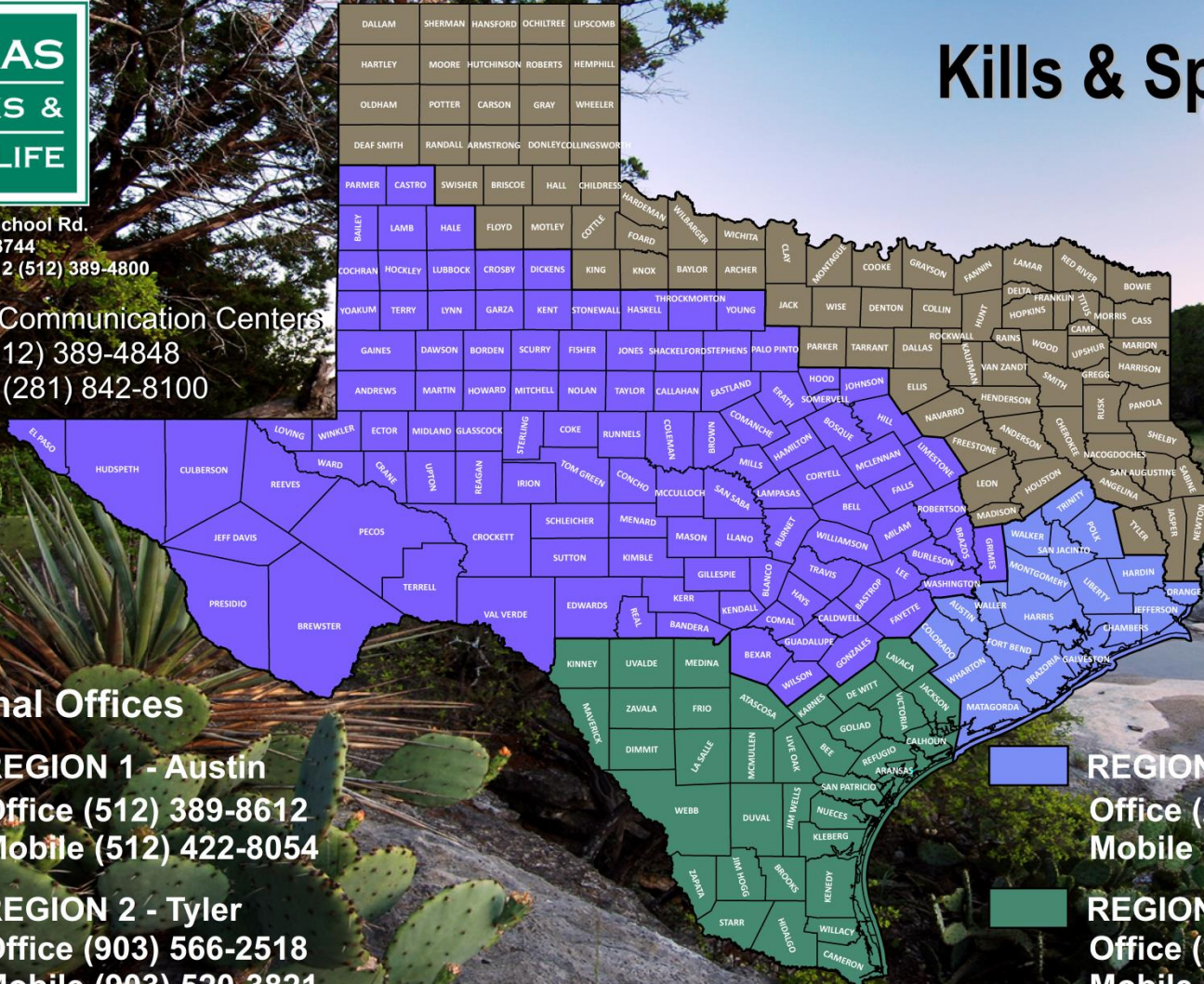
Regional Offices

REGION 1 - Austin
Office (512) 389-8612
Mobile (512) 422-8054

REGION 2 - Tyler
Office (903) 566-2518
Mobile (903) 520-3821

REGION 3 - Dickinson
Office (281) 534-0107
Mobile (281) 705-5592

REGION 4 - Corpus Christi
Office (361) 825-3246
Mobile (361) 658-3181



TPWD Kills and Spills Team Regional Contacts



Texas Parks and Wildlife Department Kills and Spills Team



If you see dead or dying fish and wildlife, or pollution threatening fish and wildlife, call one of the regional biologists or 24 hour Communications Centers below immediately! Or call your local Game Warden.

24 Hour Communications Centers

Main:

(512) 389-4848
4200 Smith School Road
Austin, Texas 78744

Houston Area:

(281) 842-8100
117 East Avenue A.
La Porte, Texas 77751

Region 1

Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78744

Alan Butler

Office: (512) 389-8612
Mobile: (512) 422-8054
Fax: (512) 389-8160
Email: alan.butler@tpwd.state.tx.us

1601 East Crest Dr.
Waco, Texas 76705

Jennifer Bronson

Office: (254) 867-7986
Mobile: (512) 680-7470
Fax: (254) 867-6839
Email: jennifer.bronson@tpwd.state.tx.us

Region 2

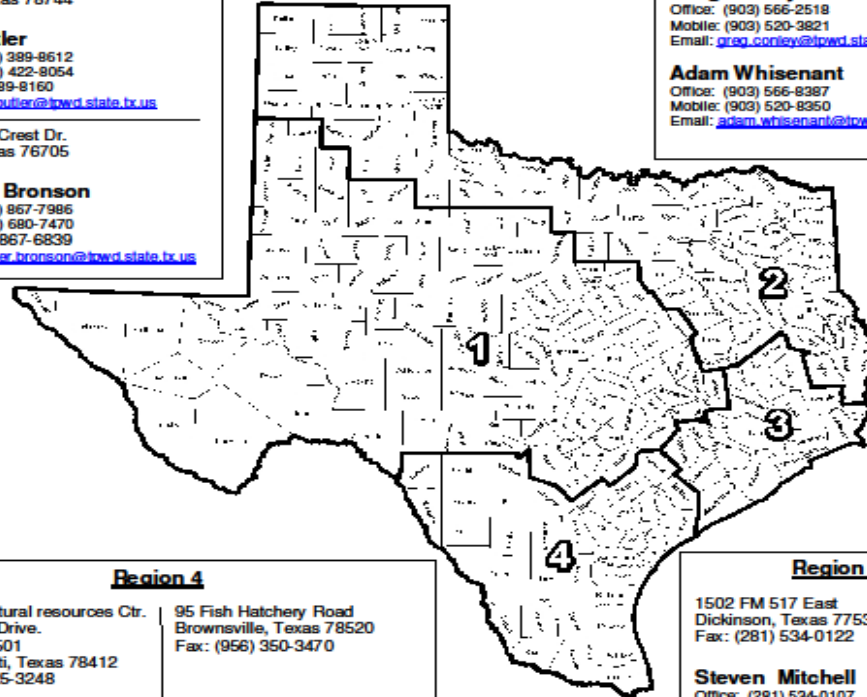
11810 FM 848, Tyler, Texas
Fax: (903) 566-2357

Greg Conley

Office: (903) 566-2518
Mobile: (903) 520-3821
Email: greg.conley@tpwd.state.tx.us

Adam Whisenant

Office: (903) 566-8387
Mobile: (903) 520-8350
Email: adam.whisenant@tpwd.state.tx.us



Region 4

TAMUCC Natural resources Ctr.
6300 Ocean Drive.
NRC Suite 2501
Corpus Christi, Texas 78412
Fax: (361) 825-3248

Alex Nuñez

Office: (361) 825-3246
Mobile: (361) 658-3181
Email: alex.nunez@tpwd.state.tx.us

95 Fish Hatchery Road
Brownsville, Texas 78520
Fax: (956) 350-3470

Willy Cupit

Office: (956) 350-4491
Mobile: (956) 465-9287
Email: willy.cupit@tpwd.state.tx.us

Region 3

1502 FM 517 East
Dickinson, Texas 77539
Fax: (281) 534-0122

Steven Mitchell

Office: (281) 534-0107
Mobile: (281) 705-5592
Email: steven.mitchell@tpwd.state.tx.us

General Goals

(Parks and Wildlife Code 12.0011(b))

- **Investigate fish kills and any type of pollution that may cause loss of fish or wildlife resources**
- **Identify the cause and if there is a responsible party**
- **Estimate the value of the lost resources**
- **Seek restoration of (restitution for) the lost resources**
- **Provide recommendations for protecting fish and wildlife resources**

Current Staffing

Multiple teams

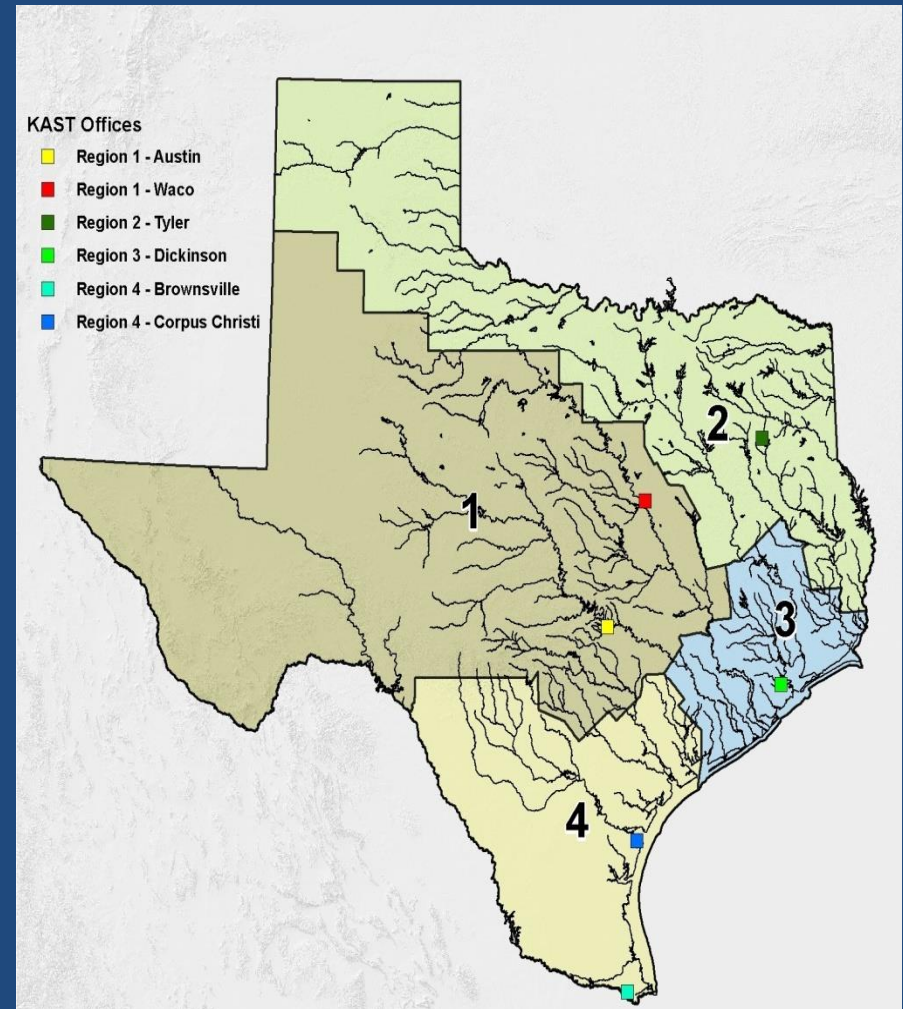
- Common members
- Common goals
- Multiple divisions
- Working together for the same purpose

“protection of state fish and wildlife resources”

Reactive, Proactive, and Restorative efforts

Challenges

- Few responders for large geographic areas
- Same or increased workload
- Cross divisional/program coordination
- Adapt to a new model



REACTIVE PRIORITIES

Fish Kills

- Natural events impacting sport and game fish, commercial, and other recreationally important species.



Pollution Events

- Impacts to fish, wildlife, and/or highly sensitive habitat.
- Natural disasters



PRISM Data Entry



Proactive Priorities

Technical Advisory

- Workgroup and Committee Participation
- Review and comment on permits directly impacting aquatic resources.
- Review and comment on proposed state water quality standards impacting aquatic and wildlife resources.

Technical Training

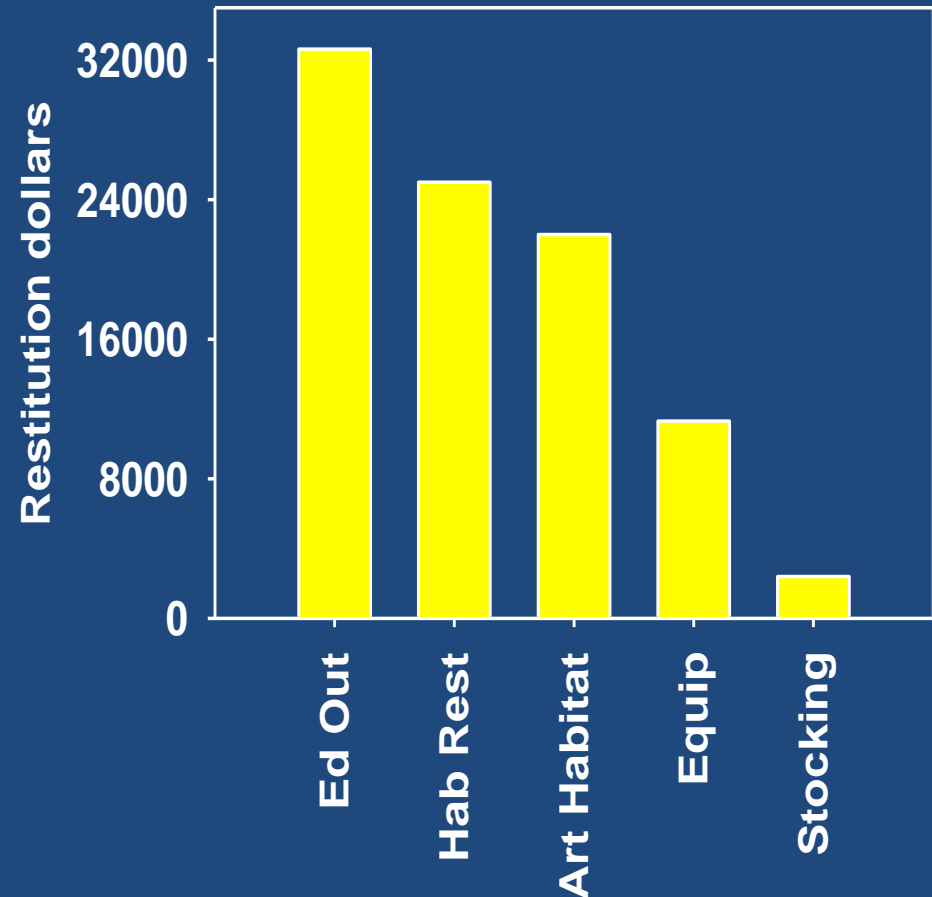
Building Partnerships



Restoration Priorities

- Compensation for impacts to resources
- Restoration
- Project Enhancement

Civil Restitution 2002-2012



Equipment



POLLUTION

Natural

- Hurricane, thunderstorm, tornado, cold fronts

Man made

- Oil storage tank failure
- Pipeline break
- Highway vehicle accident
- Train derailment
- Intentional dumping or release



POLLUTION

INDUSTRIAL

Petroleum

- Pipeline break, storage tank, refinery, equipment failure



Chemical

- Highway vehicle, rail car, chemical plant



Power Generation

- Power plants



POLLUTION

MUNICIPAL

Sanitary Sewer Systems

- Unauthorized discharge (lift station, manhole, pipeline break, chlorine - HTH)



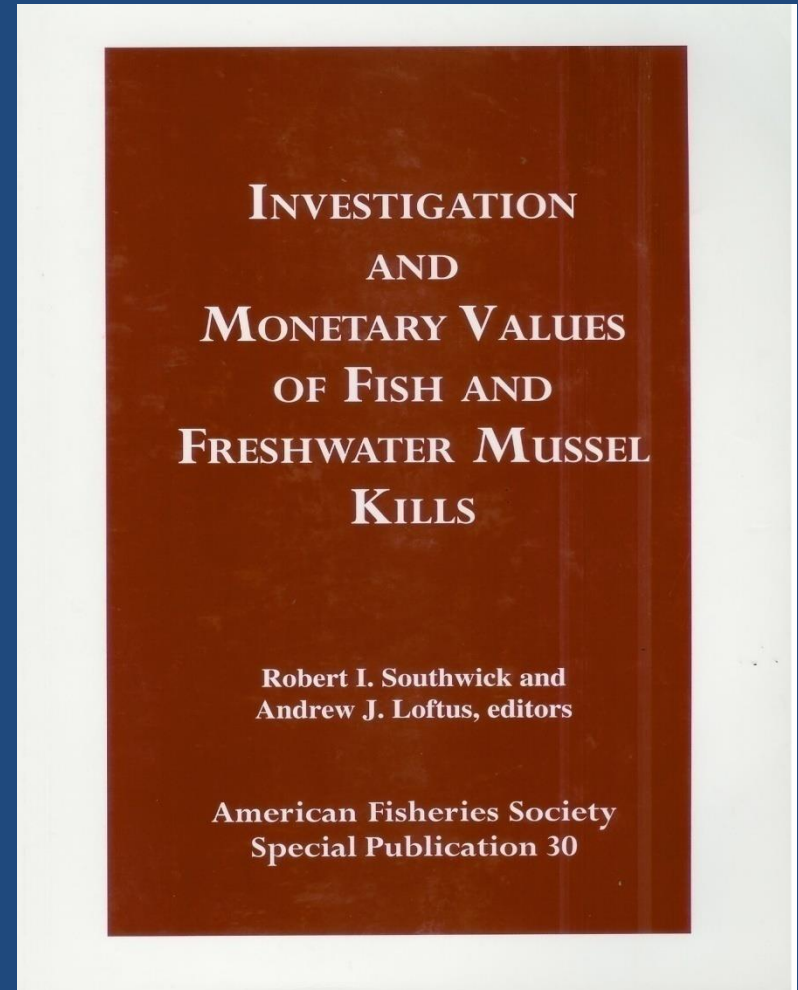
Potable Water Systems

- Unauthorized discharge (pipeline break, chlorine residual)



Investigation Methods

- Follow KAST standard operating procedures based on AFS guidelines for investigations.
- Use AFS guidelines in estimating total number of dead fish.



Civil Restitution

➤ **31 TAC Section 9.11 (e)(1) (N):**

- *In accordance with Texas Parks and Wildlife Code, Section 12.301, a permittee or contractor is liable to the State for the value of the fish and wildlife taken, killed, or injured by work under a permit.*

➤ **TPWD Code 12.0011 (b)(1) and 12.301**

- *To investigate fish kills and any type of pollution that may cause loss or injury to fish or wildlife resources, to identify the cause and parties responsible for the fish kill or pollution, and to seek restitution for these losses or injuries.*

The [Potential Responsible Party] could be asked to pay restitution for the resources lost or injured during the above referenced incident.

Civil Restitution

Restitution is not a penalty or fine, but the total calculated sum of monetary value of the resources lost or injured plus the investigation/response costs incurred by TPWD. It is TPWD policy to use these funds to restore, replace, or complete studies on resources similar to those that were lost or injured.

Case Scenario

Hydrochloric Acid (HCL)

- Jasper County, February 2011
- Sandy Creek and two of its tributaries
- Source == oil field - hydraulic fracturing
- Could have been prevented

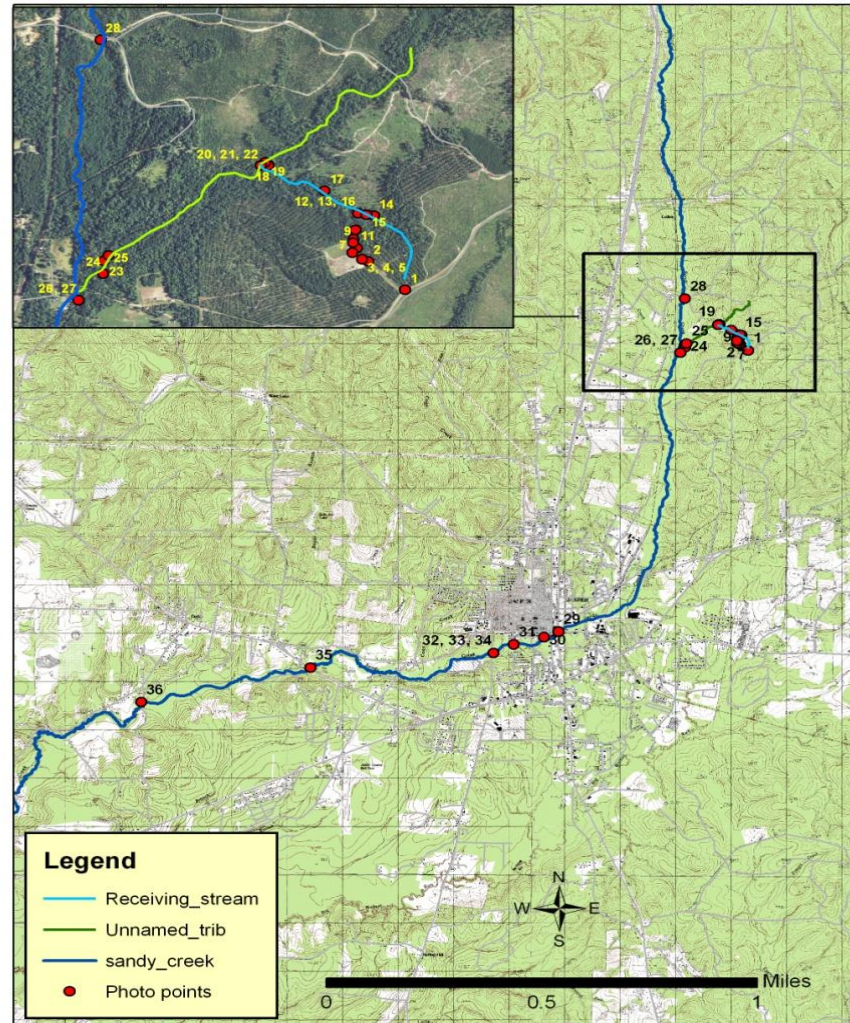
Sandy Creek Fish Kill

IMPACTS

- 11 mile long fish kill
- Water quality impacts in excess of 15 miles
- Killed an estimated 3,897 fish consisting of 24 species, and aquatic invertebrates, including crayfish.

Sandy Creek Fish Kill

Sandy Creek fish kill, Jasper County, February 2011



There is no claim to the accuracy of this map. It is for reference only.

Sandy Creek Fish Kill



Sandy Creek Fish Kill



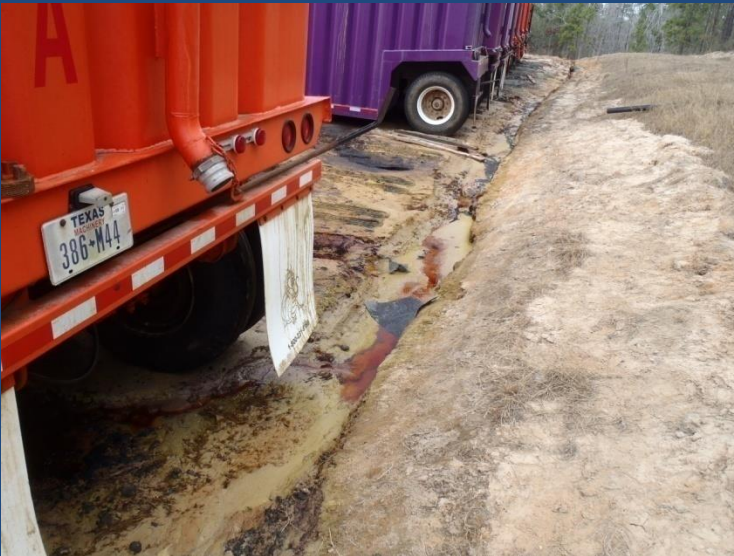
Sandy Creek Fish Kill



Sandy Creek Fish Kill



Sandy Creek Fish Kill



Sandy Creek fish kill



pH 1.9 su



pH 2.9 su



CIVIL RESTITUTION

Total value of dead fish = \$21,770.47

Total Investigation Costs = \$8,200.73

Total Civil Restitution recovered from RP

\$29,970.20



Explosives

TPWD Code 66.003

Placing Explosives Or Harmful Substances In Water

(a) No person may place in the water of this state an explosive, poison, or other substance or thing deleterious to fish.

(b) Subsection (a) of this section does not apply to the use of explosives necessary for construction purposes when the use is authorized in writing by the department.



Leaving Fish to Die

TPWD Code 66.011

Killing Fish During In-Stream Activities

A person commits an offense if the person leaves edible fish or bait fish taken from the public waters of this state to die without the intent to retain the fish for consumption or bait.



Illegal Means and Methods

Texas Administrative Code §57.973

Lists the authorized devices, means and methods for taking fish and other aquatic life. The list of authorized means and methods does not include dewatering/asphyxiation, explosives, construction or maintenance activities, electroshock, or poisons.



Exotic and Harmful Species

TPWD Code 66.007

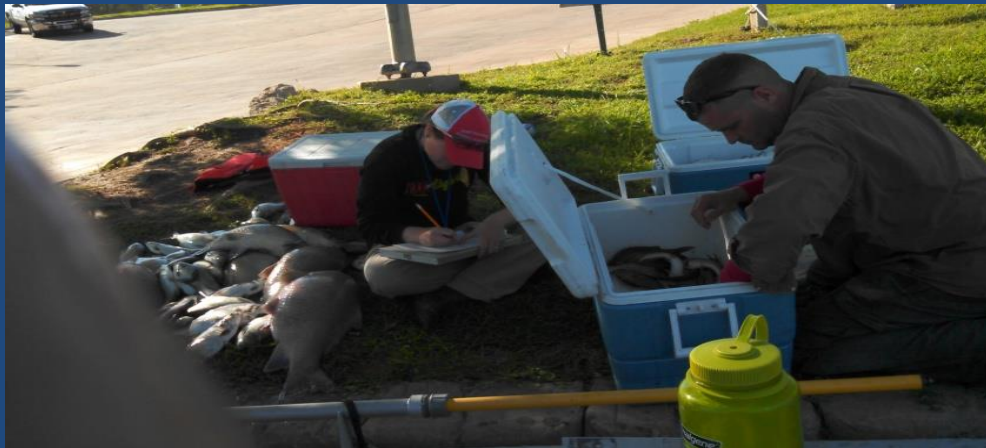
No person may possess or relocate any species classified as an exotic harmful or potentially harmful species (e.g., tilapia, zebra mussel, armored catfish, Red-Rim Melania etc.) without a permit



TPWD Code 66.015

The department is required to consider the impacts of any taking or stocking of species on the existing biological ecosystem.

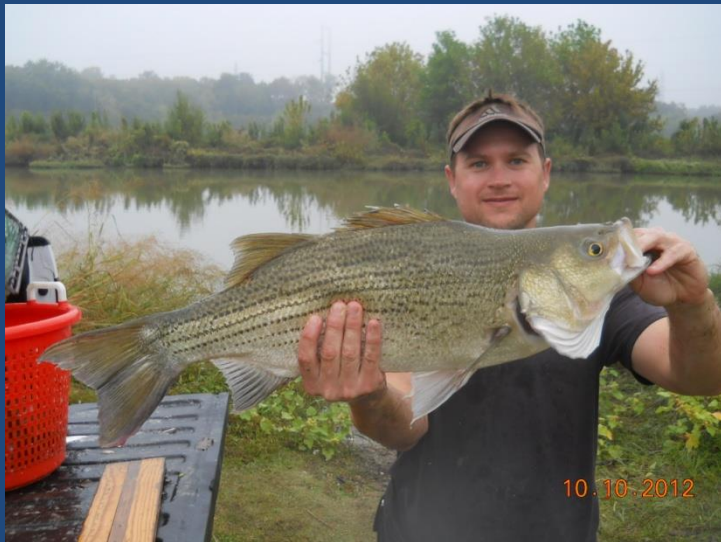
The department may enter into written agreements with other entities to take, transport, or release fish and wildlife.



TPWD Code 66.015

Stocking Permit

If any aquatic organisms are to be stocked or relocated within the State, a Permit to Introduce Fish, Shellfish, or Aquatic Plants into Public Waters needs to be completed. The **Aquatic Resource Relocation Plan** is a part of this permit process to ensure that best management practices are used.



Aquatic Resource Relocation Plan

- Construction or maintenance activity that takes place in or near Public Waters.
- Includes but not limited to: pipelines, boring/ trenching, oil/gas industry, municipal, road/bridge construction, dam work, boat ramp construction/maintenance, dewatering, coffer dams, stream bank restoration etc.



Marble Falls Bridge Demolition



Aquatic Resource Relocation Plans

- Exact location
- Purpose of the activity
- Notification in advance to develop plan
- Method of collecting and moving the aquatic life
- Types and sizes of containers to be used
- Transportation methods and destination
- Documentation and disposal of dead and non-native fishes
- The best management practices (BMPs)
- Estimation of the time expected to complete the fish and mussel removal operation
- Identify any state or federally threatened or endangered species that may occur
- Identify all freshwater mussels that may become stranded due to the operation. Explain what methods will be used to protect the mussels

Next Steps

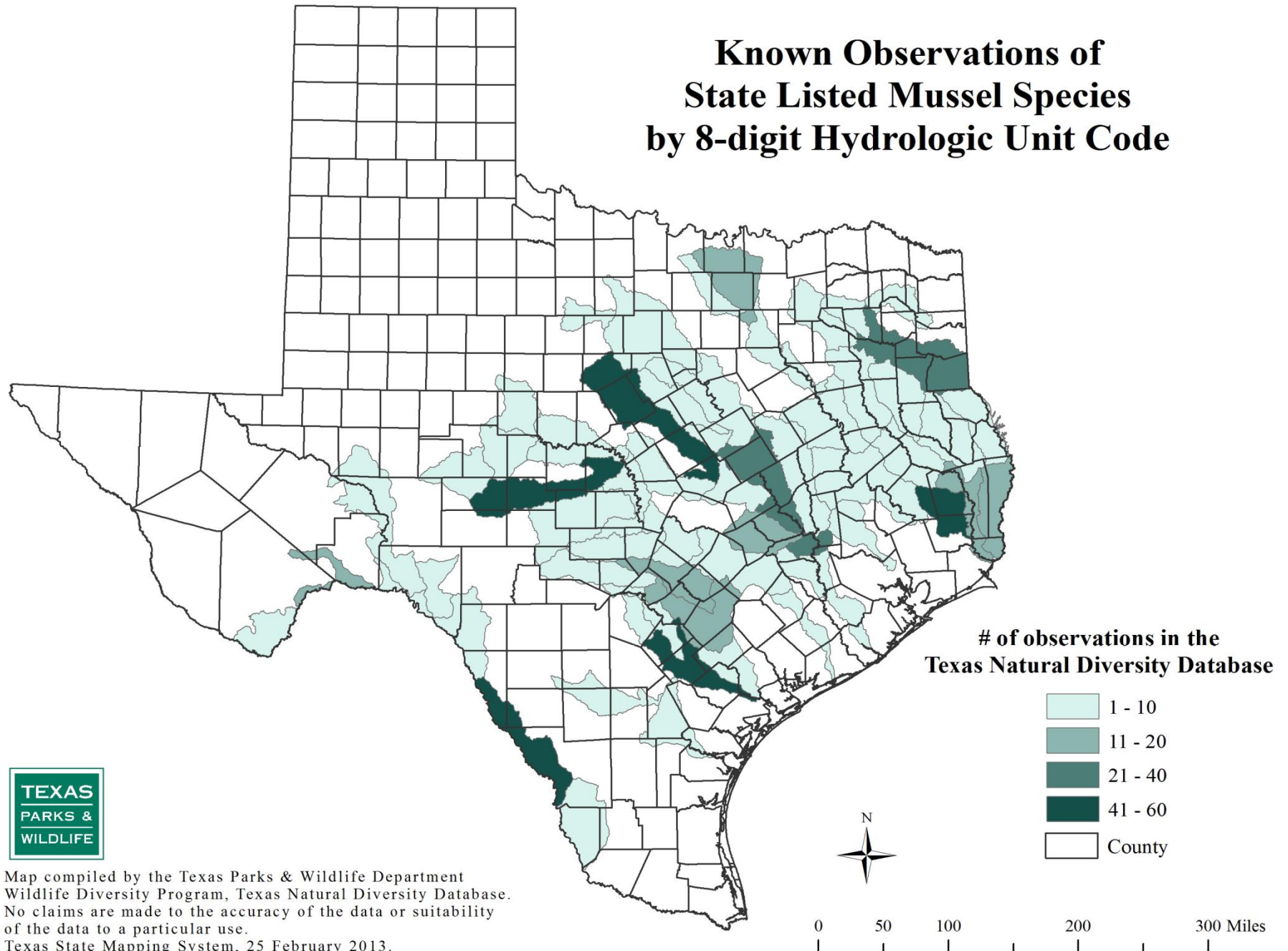
- **Contact your KAST Regional Biologist**
- **Complete Aquatic Resource Relocation Plan, Stocking Permit, and Sand and Gravel Permit as applicable**
 - **Work with KAST Biologist to develop an appropriate Mussel Survey for the site (if applicable)**
- **Once the Mussel survey is complete, and the Plan and Permits are approved the work can be conducted based on the parameters set forth in the written agreement**

Freshwater Mussels in Texas

- There are about 300 Mussel Species in the U.S.
- Texas is home to 52 known Mussel Species
- As of 2009 there are 15 State-Listed Species of Freshwater Mussels in Texas
- There are 6 Candidates for Federal Listing
- 1 Federally Endangered Species in Texas
 - Ouachita Rock-Pocketbook
- There is limited knowledge of mussel distributions in Texas



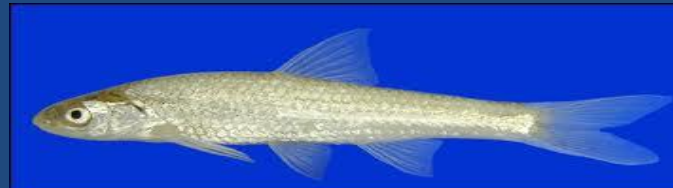
Known Observations of State Listed Mussel Species by 8-digit Hydrologic Unit Code



Map compiled by the Texas Parks & Wildlife Department
Wildlife Diversity Program, Texas Natural Diversity Database.
No claims are made to the accuracy of the data or suitability
of the data to a particular use.
Texas State Mapping System, 25 February 2013.

State and Federally Listed Fish in Texas

- There are 32 listed Fish Species in Texas
- 9 of which are State and Federally Endangered
- Only 1 Federally listed fish is in the Gulf of Mexico
- 3 additional State listed fish in coastal waters
- There are 28 Freshwater Fish listed in Texas
- Several are endemic to Texas



Protection of State-Listed Species
Texas Parks and Wildlife Department Guidelines

Protection of State-Listed Species

State law prohibits any take (incidental or otherwise) of state-listed species. State-listed species may only be handled by persons possessing a **Scientific Collecting Permit** or a **Letter of Authorization** issued to relocate a species.

- **Section 68.002 of the Texas Parks and Wildlife (TPW) Code** states that species of fish or wildlife indigenous to Texas are endangered if listed on the United States List of Endangered Native Fish and Wildlife or the list of fish or wildlife threatened with statewide extinction as filed by the director of Texas Park and Wildlife Department. Species listed as Endangered or Threatened by the Endangered Species Act are protected by both Federal and State Law. The State of Texas also lists and protects additional species considered to be threatened with extinction within Texas.
- **Animals** - Laws and regulations pertaining to state listed endangered or threatened animal species are contained in Chapters 67 and 68 of the Texas Parks and Wildlife (TPW) Code and Sections 65.171 - 65.176 of Title 31 of the Texas Administrative Code (TAC). State-listed animals may be found at 31 TAC §65.175 & 176.
- **Plants** - Laws and regulations pertaining to endangered or threatened plant species are contained in Chapter 88 of the TPW Code and Sections 69.01 - 69.9 of the TAC. State-listed plants may be found at 31 TAC §69.8(a) & (b).

Prohibitions on Take of State Listed Species

Section 68.015 of the TPW Code states that no person may capture, trap, take, or kill, or attempt to capture, trap, take, or kill, endangered fish or wildlife.

Section 65.171 of the Texas Administrative Code states that except as otherwise provided in this subchapter or Parks and Wildlife Code, Chapters 67 or 68, no person may take, possess, propagate, transport, export, sell or offer for sale, or ship any species of fish or wildlife listed by the department as endangered or threatened.

"Take" is defined in Section 1.101(5) of the Texas Parks and Wildlife Code as:

"Take," except as otherwise provided by this code, means collect, hook, hunt, net, shoot, or snare, by any means or device, and includes an attempt to take or to pursue in order to take.

Penalties

The penalties for take of state-listed species (TPW Code, Chapter 67 or 68) are:

- 1ST Offense = Class C Misdemeanor:
\$25-\$500 fine
- One or more prior convictions = Class B Misdemeanor
\$200-\$2,000 fine and/or up to 180 days in jail.
- Two or more prior convictions = Class A Misdemeanor
\$500-\$4,000 fine and/or up to 1 year in jail.

Restitution values apply and vary by species. Specific values and a list of species may be obtained from the TPWD Wildlife Habitat Assessment Program.

Early Notification is the Key to Any Successful Investigation



Questions?





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